

# How to Finish



# Fir Plywood





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## WHAT IS FIR PLYWOOD

Fir plywood is real wood in large, light, extra strong panels. Selected Douglas fir logs are peeled to form precise wood veneers. It is an engineered product made of an odd number of the thin veneers (plys) — three, five, seven — placed so the grain of one ply is at right angles to the next. The veneers are adhered by completely waterproof glues (Exterior-type) or highly moisture resistant glues (Interior-type).

## USE ANY FINISH ON PLYWOOD

As plywood is a real wood it will accept any finish. It's easy to get professional-looking results on clean, smoothly sanded fir plywood when you use top-quality materials and follow a few simple rules. If you want attractive, durable finishes, you'll find top-

quality paints, varnishes and stains are the most economical in the long run. Some products require primer coats of compatible formulations. Your local dealer will help you choose the right product for the job you have in mind. Read manufacturers' directions carefully; follow them for best results.

## PREPARE SURFACES PROPERLY

Plywood does take paint well — but that doesn't mean it can be applied carelessly. The quality of the finish depends upon the care with which it is applied. Be sure to clean all surfaces. Do not paint over dust or spots of oil and glue. Fill nail holes and wood blemishes in the face or edge of panels with putty or spackle. Plywood is already sanded smooth, so it's not hard to produce perfect surfaces. To touch sand always sand with the grain, using fine grade sandpaper.

## Interior Finishes



## PAINT OR ENAMEL

Any standard woodwork finish is easy to use if manufacturer's directions are followed closely. For durability on frequently cleaned surfaces, use washable enamels.

1. After sanding, brush on flat paint, enamel undercoat or resin sealer. Paint may be thinned slightly to improve brushability. Fill surface blemishes with spackle or putty when first coat is dry. Sand lightly and dust clean.

2. Apply second coat. For a high gloss enamel finish, mix equal parts of flat undercoat and high gloss enamel. Tint undercoat to approximate shade of finish coat. Sand slightly when dry and dust clean.

3. Apply final coat as it comes from the can.

A two-step finish, without the second undercoat, also may be used.

## WATER-THINNED PAINTS

Seal plywood with clear resin sealer, shellac or flat white oil paint, to control grain raise. Paint according to manufacturer's directions for a sealed surface.

## CLEAR OR COLORED LACQUER

You can spray, brush or wipe on lacquer. Use the type made for your method and follow the manufacturer's directions. Sand lightly or steel wool between each coat.

To wipe on brushing lacquer, cover small areas at a time with a folded pad or soft cloth dipped in three parts lacquer and one part lacquer thinner. Rub with a circular motion and carefully blend each patch with the area covered previously.

## STIPPLED TEXTURES

Textured surfaces are obtained by a heavy coat of stippling paint after priming. Then texture the paint coat with stipple brush, roller or sponge.

## LIGHT STAIN-GLAZE

A "natural" finish which mellows the wood's contrasting grain pattern with effective warm colors always is popular.



When using any finish which retains natural grain pattern, carefully select plywood for pattern and appearance. The four-step procedure is recommended for fine work.

(1) *Whiten Panel.* Use pigmented resin sealer or thin interior white under-coat one-to-one with turpentine or thinner. After 10 to 15 minutes (before it becomes "tacky") dry-brush or wipe with dry cloth to permit grain to show. Sand lightly with fine paper when dry.

(2) *Seal Wood.* Apply thinned white shellac or clear resin sealer. Sand lightly with fine sandpaper when dry. Omit seal coat for greater color penetration in Step 3.

(3) *Add Color.* There is no limit to the colors and shades you can get by changing this color coat. Use tinted interior undercoat, thinned enamel, pigmented resin sealer, or color in oil. With care, light stains might also be used. Apply thinly and wipe or dry-brush to the proper depth of color. Sand lightly with fine paper when dry.

(4) *Provide Wearing Surface.* Apply one coat of flat varnish or brushing lacquer. Rub with fine steel wool when dry for additional richness.

### EASY, ECONOMICAL FINISHES

An easy, inexpensive two-step procedure will give you a pleasant, "blond" finish. First, apply interior white undercoat thinned so wood pattern shows; tint undercoat if color is desired. Sand lightly when dry, then apply clear shellac, lacquer or flat varnish for durability.

The exact, natural appearance of plywood may be retained by applying a first coat of white shellac followed by flat varnish after sanding. Several coats of brushing lacquer may also be used.

Attractive, economical one-coat stain waxes also are available in colors. If dark stain is wanted, first apply clear resin sealer to subdue grain.

### Interesting Surface Effects

It is easy to dramatize door panels, drawer fronts and table tops with simple textures. Use a power saw, drill press or router to score the panel 1/16" deep in 2" squares. Deeper cuts on only one side of the panel should be avoided; they will destroy the built-in stability of plywood and cause warping.

If you want the pattern as pronounced as possible, fill the indentations with a contrasting color, or use a lighter or darker tint of your basic color. The most subdued pattern will be produced by the slight shadow-line alone.

Small holes drilled at the intersections of regular lines, or hand tooling with plain or embossed punches are other possible surface treatments.

### Special Products



**SPECIAL SURFACE PATTERNS** (Brushed, Striated, Embossed) — For interior use, you may simply coat with wax or a clear varnish. Conventional stains, enamel or lacquer may also be used. Water, oil or rubber base paints may be used depending on the location and wear expected.

Two-tone effects are achieved by letting first coat dry, following with second color lightly applied, then rubbed off the high spots.

Other interesting two-tone effects have been achieved with roller-applied rubber base paints.

For outdoor applications use Exterior-type panels only. Follow the regular three-coat method. Be sure to prime all edges.

**TEXTURE 1-11** — For any outdoor use the finishing material recommended is highly pigmented exterior stain. Suitable products are sold under such names as shingle stain, shake stain, shingle or shake finish, shake paint. Be sure to follow manufacturer's directions for application. Do not use clear finishes or penetrating, low-pigment stains.

As with special surface plywood finishes you may coat with wax or clear varnish for interior use. Conventional stains, enamel lacquer, and water, oil or rubber based paints may be used.

Two-tone effects are achieved by brush applying one color followed by a rolled on contrasting second color.

**MEDIUM DENSITY OVERLAID PLYWOOD AND PLYRON** — In painting these panels follow general procedure for regular fir plywood.

**HIGH DENSITY OVERLAID PLYWOOD** — This panel is generally specified for its natural surface properties and is left unpainted. If painting is desirable to obtain a matching color finish, follow procedure as for other plywoods.



## Exterior Finishes



### GENERAL DATA

Field observations, exposure fence studies and weatherometer tests all indicate that the best paint job for regular wood siding also is best for Exterior fir plywood. The high grade exterior house paints of either TLZ (titanium-lead-zinc) formulation or white lead and oil give excellent service on plywood. The TLZ paints tend to have more lasting appearance qualities. Avoid paints which set to a hard, brittle film.

For complete compatibility between coats, specify prime and finish coats produced by the same manufacturer and formulated as companion products. Allow each coat to dry before the following coat is applied, but painting should be completed as soon as practicable to obtain good adhesion between coats.

### EDGE SEALING

Seal all edges with a heavy application of a high-grade exterior primer, aluminum paint or heavy lead and oil paint (mixed in proportions of 7 lbs. white lead paste, 1 pt. raw linseed oil and 1 oz. of dryer applied without thinning). This applies both to exposed edges and edges of panels that are lapped, butted or covered with moldings.

### BACK PRIMING

On storage units in unusually damp locations, panels should be back primed with exterior primer.

### PAINTING PROCEDURE

The three-coat system is suggested as the best conventional protective coating. A dip or brush application or a top quality water repellent (toxic or non-toxic) before panels are painted will provide additional protection.

1. The initial or prime coat is most important!

A high grade exterior primer, thinned with 1 pt. of pure raw linseed oil per gallon of paint (check directions — some paints are not to be thinned with linseed oil) and thoroughly brushed on is recommended. A top quality exterior aluminum house paint (long oil spar varnish type vehicle preferred) makes an excellent outdoor primer for plywood and conventional paints may be satisfactorily applied over the aluminum prime coat. Greater opacity of finish coats may be required, however, to completely mask aluminum primer. Apply at least prime coat as soon as possible.

2. and 3. Over this primer, apply the second and third paint coats according to paint manufacturer's directions.

### OTHER FINISHES

Top quality 2-coat TLZ paints have been found to perform satisfactorily. However, the same dry film thickness as the three-coat system is necessary.

Stains and natural finishes when applied to plywood fail to provide a protective film; therefore, face checking may be expected. (The permanent waterproof bond between plys, of course, is unaffected.) Natural finishes usually require extra maintenance.

### MARINE USES

On plywood boats, very satisfactory paint finishes are obtained by using high-grade marine primers, undercoats and finish coats. Seal edges and prime plywood well; for proper adhesion, be sure all paint coats are completely compatible. Finishes which retain some flexibility give best results. Semi-gloss finishes usually perform better than high gloss.



**FOR INFORMATION ON BUYING AND WORKING FIR PLYWOOD  
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